

Report of Analysis

Submission: 2004-004564-NYHB
 Customer: Petro-Canada
 Terminal: OSWEGO SPRAGUE NY
 Vessel: MT DIAMOND STAR
 Reference:
 Purchase Order:
 Date Received: 31-Oct-04
 Date Analyzed: 31-Oct-04
 Date Reported: 1-Nov-04

SPRAGUE PROVIDES THE ATTACHED INSPECTION REPORT/ANALYSIS REPRESENTING THE SPECIFICATIONS OF THE PRODUCT AT THE SPRAGUE TERMINAL IN TANK ON THE DATE OF INSPECTION NOTED ON THE CERTIFICATE. THIS ANALYSIS IS PROVIDED TO THE CUSTOMER FOR THE PURPOSE OF ESTABLISHING THE INDEPENDENTLY VERIFIED PRODUCT SPECIFICATION ON A COMPOSITE BASIS IN SPRAGUE'S TERMINAL SHORE TANK AS NOTED ON THE CERTIFICATE. THE INSPECTION REPORT IS NOT TO BE USED FOR ANY OTHER PURPOSE. SPRAGUE DISCLAIMS ANY LIABILITY FOR THE PRODUCT AFTER DELIVERY BY SPRAGUE TO CUSTOMER. SPRAGUE DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR AN INTENDED USE EXCEPT AS MAY BE SPECIFICALLY SET FORTH IN WRITING IN ANY CONTRACT OR TERMS OF SALE BETWEEN SPRAGUE AND A BUYER OF PRODUCT. SPRAGUE ASSUMES NO LIABILITY FOR CLAIMS OR LOSSES THAT MAY ARISE FROM CUSTOMER'S USE OF THIS INSPECTION REPORT/ANALYSIS.

Lab Reference : 2004-004564-NYHB-001			
Sample Designated As : Shore Tank 5 After Discharge Upper NO. 6 FUEL OIL			
Method	Test	Results	Units
D4052	API Gravity @ 60 Deg F	13.3	deg API
D4294	Sulfur	1.30	Wt %

Lab Reference : 2004-004564-NYHB-002			
Sample Designated As : Shore Tank 5 After Discharge Middle NO. 6 FUEL OIL			
Method	Test	Results	Units
D4052	API Gravity @ 60 Deg F	13.1	deg API
D4294	Sulfur	1.33	Wt %

Lab Reference : 2004-004564-NYHB-003			
Sample Designated As : Shore Tank 5 After Discharge Lower NO. 6 FUEL OIL			
Method	Test	Results	Units
D4052	API Gravity @ 60 Deg F	13.0	deg API
D4294	Sulfur	1.33	Wt %

Lab Reference : 2004-004564-NYHB-005			
Sample Designated As : Shore Tank 5 After Discharge Equal UML Composite NO. 6 FUEL OIL			
Method	Test	Results	Units
D4052	API Gravity @ 60 Deg F	13.1	deg API
D4294	Sulfur	1.32	Wt %
D445/D2161	Kinematic Viscosity @ 122°F	303.8	cSt
D445/D2161	Saybolt Furol Viscosity @ 122 °F	143.5	SFS
D97	Pour Point	3	deg C
D97	Pour Point	37	deg F
D95	Water	0.1	Vol %
D473	Sediment by Extraction	0.03	Wt %
D1796	Sediment and Water	0.1	Vol %

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Lab Reference : 2004-004564-NYHB-005			
Sample Designated As : Shore Tank 5 After Discharge Equal UML Composite NO. 6 FUEL OIL			
Method	Test	Results	Units
D93 method A	Corrected Flash Point	213	deg F
D482 @ 775 deg C	Ash @ 775 deg C	0.034	Wt %
ICP	Sodium	24	ppm
ICP	Vanadium	45	ppm
D5762	Nitrogen	0.33	Wt %
D240	Gross Heat of Combustion	18580	BTU / lb
D240	Gross Heat of Combustion	151408	BTU / gal
D3279	Asphaltene / n-Heptane Insolubles	1.41	Wt %
D4530	Micro Carbon Residue	8.8	Wt %

Intertek Caleb Brett
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